



Appendix A to BACT Analysis Application Instructions

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**EXAMPLES OF CONTROL EQUIPMENT TECHNOLOGIES CONSIDERED IN BACT ANALYSES**

The following five tables list control equipment technologies arranged by pollutant controlled which may be considered when performing BACT analyses. These lists are not exhaustive, and applicants are expected to thoroughly research recently issued BACT determinations for additional control technologies. This list is a guideline to provide applicants with a starting point for identifying types of control equipment which may be considered during BACT analyses.

<b>A. Examples of Control Technologies for Particulate Matter (PM)</b>	
Wet Scrubber	Dust Suppressant - Water Spray
Gravity Collection System	Dust Suppressant - Chemical
Centrifugal Collection System	Metal Fabric Filter Screen
Electro Precipitator Collection System	Mat or Panel Filter
Gas Scrubber	Impingement Plate Scrubber
Mist Eliminator	Enclosure
Fabric Filter (High, Medium & Low Temperature)	Venturi Scrubber
Baffle	Spray Tower
Wet Cyclonic Separator	Water Curtain
Gravel Bed Filter	Annular Ring Filter
Molecular Sieve	Multi Cycle With or Without Fly Ash Re-Injection

<b>B. Examples of Control Technologies for Volatile Organic Compounds (VOCs)</b>	
Catalytic Afterburner	Catalytic Afterburner - Heat Exchanger
Direct Flame Afterburner	Direct Flame Afterburner - Heat Exchanger
Flare	Vapor Recovery System
Activated Carbon Adsorption	Packed-Gas Adsorption Column
Tray Type Gas Adsorption Column	Bottom Filling
Nitrogen Blanket	Conservation Vent
Submerge Filling	Vapor Lock Recovery System

<b>C. Examples of Control Technologies for Sulfur Dioxides (SO<sub>2</sub>)</b>	
Wet Limestone Injection	Dry Limestone Injection
Alkalized Alumina	Catalytic Oxide-flue Gas Desulfurization
Ammonia Injection	Scrubbing
Citrate Process Scrubbing	Dual Alkali Scrubbing
Magnesium Oxide Scrubbing	Well-Lord/Sodium Scrubbing
Wet Lime Slurry Scrubbing	Alkaline Fly Ash Scrubbing
Sodium Carbonate Scrubbing	Sodium Alkali Scrubbing
Fluid Bed Dry Scrubber	Catalytic Reduction

<b>D. Examples of Control Technologies for Nitrogen Oxides (NO<sub>x</sub>)</b>	
Low NO <sub>x</sub> Burner	Ultra Low NO <sub>x</sub> Burner
Dry Low NO <sub>x</sub> Burner	Staged Combustion
Flue Gas Re-Circulation	Reduced Combustion Air Preheat
Steam or Water Injection	Low Excess Air Firing
Fuel Low Injection	Air Injection
Ammonia Injection	Selective Catalytic Reduction
Selective Non-Catalytic Reduction	Non-Selective Catalytic Reduction

<b>E. Examples of Control Technologies for Carbon Monoxide (CO)</b>	
Thermal Oxidizer	Post Combustion Chamber